



Jonah Freedman, MGIST

Research Assistant, Public Transportation Group

<https://itre.ncsu.edu/focus/transit/>

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PROFESSIONAL SKILLS

Geospatial Data Analysis and Remote Sensing, transportation research and analysis, reporting and assessment design, transportation planning, training delivery, community and rural transportation operations and performance, intercity bus operations and planning, data collection and management, origin/destination and route analysis and performance planning.

EDUCATION

2015 **North Carolina State University**
Master of Geospatial Information Science and Technology

2010 **University of North Carolina at Asheville**
Bachelor of Science (BS); Environmental Studies, Minor in Economics

EXPERIENCE

Research Assistant to the Public Transportation Group, *Institute for Transportation Research and Education, North Carolina State University*

- Responsible for assisting NCDOT and community transportation systems in North Carolina with technology implementations, operational reporting, operational improvements, planning for the future, and training;
- Designs and maintains Google Transit data feeds in accordance with General Transit Feed Specification formatting for community transportation agencies;
- Assists in community transportation planning and performance analysis through the development of individual system performance plans and site visits;
- Mapping and Geospatial Data Analysis through ArcGIS and data extracts from routing software to assist in route planning, service structuring and fixed route service area analysis;
- Develops and regularly produces reports on the financial and operations statistics of subsidized Intercity Bus organizations for NCDOT;
- Works with the community transportation systems to improve performance through site visits, assessments, and data analysis;
- Understands various transit modes and recommends modes to for local transit systems to improve performance and meet community needs;
- Gives presentations at national and state conferences for transit professionals.
- Analyzes reports for bi-annual vehicle utilization data for 80 transit systems;
- Collects and analyzes reports for annual Operating Statistics for 99 urban and rural transit systems;
- Provides technical support for Asset Management software;
- Delivers reports and analysis to the Department of Health and Human Services on Elderly and Disabled transportation expenditures;
- Designs and implements the Asset Management Plans for NCDOT in accordance with the regulations established by the Federal Transportation Administration;
- Performs other data analysis, mapping, and applied research for other transit-related uses as necessary.

Research Assistant and GIS Analyst, *USDA Forest Service, Raleigh NC*

- Content Development for the Template for Assessing Climate Change Impacts and Management Options (TACCIMO).
- Working closely with National Forest representatives throughout the state to assess and design Forest Management Plans with climate change accounting
- Worked through the Eastern Forest Environmental Threat Assessment Center (EFETAC) to assist researchers and Forest Service Officials with updating management regimes.
- Assisting with presentations;
- Designing a tool for the Water Supply Stress Index (WaSSI) model used to extract and incorporate essential variables into the model from online databases.
- Developing presentations to the research team regarding the progression of the TACCIMO transition to an open-source database management system.

PROFESSIONAL SKILLS

- Presentation at the North Carolina Public Transportation Association conference (2016)
- Teaching and offering software support for AssetWorks and GTFS
- Ability to understand and analyze large amounts of transit data
- Geographic Information Systems using ArcGIS and Remote Sensing Software
- Programming and developing tools using MS Access and Excel
- Website development
- Familiar with different Automated Scheduling and Routing Software, TrIP_Maker

AWARDS / RECOGNITIONS / CERTIFICATIONS

- Graduated with membership in the Honors Society Phi Kappa Phi (2015)
- ADA Transit Certification (2015)
- Graduate Certificate In Geographic Information Systems (2014)

SOFTWARE AND DMBS SKILLS

ArcGIS, Trimble professional and recreational GPS, ERDAS Imagine, ArcHydro, Digital Watershed Delineation, Computer Cartography, Microsoft Office, Enterprise Geospatial Data Services, Spatial Database Models, File Geodatabases, Web-Mapping and Mobile Devices, Map Service, Feature Service and Geoprocessing Service Publishing, Open Source GIS (QGIS and GRASS), ArcGIS 10.2.2 for Server, PostGIS, PostgreSQL 9.2.2, Windows Firewall Configuration, Windows Server Manager, pgAdmin, SQL, HTML & CSS, XML, Javascript, Dojo, jQuery and multiple programming editors and HTML editors.

VOLUNTEERING

- Donating platelets through apheresis at Rex Hospital Blood Center in Raleigh
- City of Oak Raleigh Marathon benefiting the Rex Healthcare Foundation
- Carolina Tiger Rescue